

REMARKS

Claims 1-11 and 13-19, as amended, and new claims 20-32 are pending in this application.

Applicants have amended certain claims because Applicants believe these amendments serve a useful clarification purpose independent of patentability. Accordingly, Applicants respectfully submit that the claim amendments do not limit the range of any permissible equivalents. In particular, claim 13 was amended to correct an inadvertent typographical error.

In addition, new dependent claims 20-25 were added to further define the invention recited in independent claim 1. New independent claim 26 incorporates the features of claims 1, 12, and 19, while new dependent claims 27-32 are similar to claims 3, 6, 10, 11, 18, and 17, respectively.

All amendments and new claims are fully supported by the specification as originally filed. *See, e.g.*, Specification at page 5, lines 13-17, page 7, lines 6-19 and page 8, lines 3 to page 9, line 22. Accordingly, Applicants respectfully request entry of these amendments.

The Revocation and Power of Attorney, Change of Correspondence Address, and Change in Attorney Docket Number

Applicants submit herewith a consolidated form providing a revocation and power of attorney, change of correspondence address, and change in attorney docket number. Applicants request that all three changes be entered and acknowledged in subsequent correspondence from the USPTO.

The Double Patenting Rejection

The Examiner rejected claims 1-18 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 of U.S. Patent No. 6,132,324 to Hebert. Claim 19 was rejected on similar grounds of obviousness-type double patenting based on the Hebert '324 patent in view of U.S. Patent No. 6,015,356 to Sullivan ("Sullivan"). Applicants submit herewith a Terminal Disclaimer in compliance with 37 CFR § 1.321(c) to overcome these rejections.

THE REJECTIONS UNDER 35 U.S.C. § 102

The Rejection Based on Sullivan

The Examiner rejected claims 1, 3-11 and 17-19 under 35 U.S.C. § 102(e) as being anticipated by Sullivan '356 for the reasons provided on page 3 of the Office Action. Applicants respectfully traverse this rejection on the grounds that Applicants both conceived and reduced to actual practice the subject matter of the present application at an earlier date than Sullivan '356.

In support of this position, Applicants submit herewith a Declaration of William E. Morgan under 37 CFR § 1.131, as well as supporting documentation. The Declaration includes a copy of an Invention Record that predates Sullivan '356. The declaration also predates U.S. Patent No. 5,730,665 to Shimosaka, which the Examiner made of record but did not rely on in the Office Action.

In light of the Morgan Declaration, Applicants respectfully submit that the Examiner's rejections based on Sullivan '356 have been overcome.

THE REJECTIONS UNDER 35 U.S.C. § 103

The Rejection Based on Sullivan in view of Ward

The Examiner rejected dependent claims 2 and 12-16 under 35 U.S.C. § 103 as being unpatentable over Sullivan '356 in view of U.S. Patent No. 3,147,324 to Ward for the reasons provided on pages 3-6 of the Office Action. Applicants respectfully traverse this rejection for the following reasons.

All of these claims are allowable at least by virtue of their dependency off of allowable claim 1. As discussed above, Sullivan '356 is no longer available as prior art in view of the Morgan Declaration predating Sullivan '356. Applicants have also sworn behind Shimosaka '665 with the Morgan Declaration, even though the Examiner did not rely upon this reference in the Office Action. Therefore, the only remaining reference raised by the Examiner is Ward '324. This secondary reference of the Examiner's § 103 rejection does not disclose or suggest all of the elements of the pending independent claims, and therefore by definition does not disclose or suggest all of the elements of the rejected dependent claims.

Moreover, Applicants respectfully submit that several features recited in the dependent claims are neither disclosed nor suggested by the art cited by the Examiner. For instance, Ward '324 is silent with regard to forming an outer layer having a thickness of less than about 0.05 inches as recited in claim 2. Nor would it be obvious to form such a thin

layer from Ward '324 since the cover is a single layer of material formed over a wound center. *See, e.g.*, Figs. 2-5 and col. 3, lines 53-56.

Likewise, Ward '324 is also silent regarding introducing the core into the thermoset material at a rate such that substantially no air bubbles are created as recited in dependent claim 14. Ward's instruction to use a wound core (*see* col. 3, lines 53-56) makes it very unlikely that there would be substantially no air bubbles because the overlapping windings of the core would result in a complex textured surface that would form a great number of voids or pockets of air, regardless of what rate the core is introduced into the mold. Applicants further disagree that it would be obvious to one skilled in the art to substantially eliminate air bubbles. The Examiner has not provided any support for this conclusion, and in fact, many times a cover layer may be purposely foamed. Since the formation of air bubbles are not *per se* undesirable to a skilled artisan as suggested by the Examiner, Applicants respectfully submit that it would not be obvious to substantially reduce them in the manner recited in claim 14. Applicants also disagree with the Examiner's statement regarding the viscosity of the thermoset material as recited in claims 15 and 16.

Finally, Applicants believe that the arguments provided above also apply to new claims 20-32, which recite elements from already pending claims. For at least these reasons, Applicants respectfully submit that the rejections under 35 U.S.C. § 103 have been overcome.

CONCLUSION

All claims are believed to be in condition for allowance. If the Examiner believes that the present amendments still do not resolve all of the issues regarding patentability of the pending claims, Applicants invite the Examiner to contact the undersigned attorneys to discuss any remaining issues.

A Petition for Extension of Time is submitted herewith, with the provision for the required fee, to extend the time for response one month to and including April 21, 2003, as April 19, 2003 falls on a Saturday. No other fees are believed due. Should any additional fee be required, however, please charge such fee to Swidler Berlin Shereff Friedman, LLP Deposit Account No. 195127, Order No. 20002.0067.

Respectfully submitted,
SWIDLER BERLIN SHEREFF FRIEDMAN, LLP

Dated: April 21 , 2003

By: 

John P. Mulgrew, Registration No. 47,809
SWIDLER BERLIN SHEREFF FRIEDMAN, LLP
3000 K Street, NW, Suite 300
Washington, D.C. 20007
(202) 424-7756 Telephone
(202) 295-8478 Facsimile

APPENDIX A
MARKED-UP VERSION OF THE REVISED CLAIMS

Please amend the claims as follows:

13. (Amended) The method of claim 1 further comprising the step of allowing the thermoset material to reside in the first mold half for about 50 to 80 seconds before the golf ball core is placed into the thermoset material.

Please add the following new claims:

20. (New) The method of claim 12, wherein the inner cover layer is formed of a material having a shore D hardness that is about 5 to about 50 greater than the shore D hardness of the thermoset material forming the outer cover layer.

21. (New) The method of claim 12, wherein the inner cover layer is formed from at least one material selected from the group consisting of an ionomer resin, a polyurethane, a polyetherester, a polyetheramide, a polyester, a dynamically vulcanized elastomer, a functionalized styrene-butadiene elastomer, a metallocene polymer, nylon, and acrylonitrile-butadiene-styrene copolymer.

22. (New) The method of claim 12, wherein the outer cover layer thermoset material has a shore D hardness in the range of about 30 to 60.

23. (New) The method of claim 22, wherein the outer cover layer thermoset material has a shore D hardness in the range of about 35 to 50.

24. (New) The method of claim 12, wherein the thermoset material of the outer cover layer comprises at least one of a thermoset urethane, a polyurethane, a thermoset urethane ionomer, or a thermoset urethane epoxy.

25. (New) The method of claim 12, wherein the outer cover layer has a thickness of less than about 0.05 inches.

26. (New) A method of forming a golf ball comprising the steps of:
- (a) forming a golf ball core;
 - (b) forming an inner cover layer around said golf ball core with a material having a first shore D hardness, wherein forming the inner cover layer comprises compression molding the inner cover material; and
 - (c) casting an outer cover layer around said inner cover layer and golf ball core with a thermoset material having a second shore D hardness less than the first, wherein casting the outer cover layer comprises:
 - (i) placing the golf ball core in core holder;
 - (ii) gelling the thermoset material in the first mold half;
 - (iii) placing the golf ball core in to the gelling thermoset material in the first mold half;
 - (iv) disengaging the golf ball core from the core holder after a selected period of time;
 - (v) placing the golf ball core, while still in said first mold half with the thermoset material against a second mold half having additional thermoset material and mating the two mold halves together; and
 - (vi) curing the thermoset material in the mated mold halves.
27. (New) The method of claim 26, wherein the inner cover layer is formed of a material having a shore D hardness that is about 5 to about 50 greater than the shore D hardness of the thermoset material forming the outer cover layer.
28. (New) The method of claim 26, wherein the inner cover layer is formed from at least one material selected from the group consisting of an ionomer resin, a polyurethane, a polyetherester, a polyetheramide, a polyester, a dynamically vulcanized elastomer, a functionalized styrene-butadiene elastomer, a metallocene polymer, nylon, and acrylonitrile-butadiene-styrene copolymer.
29. (New) The method of claim 26, wherein the outer cover layer thermoset material has a shore D hardness in the range of about 30 to 60.

30. (New) The method of claim 29, wherein the outer cover layer thermoset material has a shore D hardness in the range of about 35 to 50.
31. (New) The method of claim 26, wherein the thermoset material of the outer cover layer comprises at least one of a thermoset urethane, a polyurethane, a thermoset urethane ionomer, or a thermoset urethane epoxy.
32. (New) The method of claim 26, wherein the outer cover layer has a thickness of less than about 0.05 inches.